

MODEL 68

SERVICE DATA SHEET No. 2

CIRCUIT ALIGNMENT

I.F. STAGES (470 Kc/s)

The I.F. coils in this receiver (and for future M.R.G. models) have been specially designed to give a response curve which begins to broaden out but still has a single peak. To achieve this desirable response, it is necessary to follow closely the instructions given below concerning the sequence of adjustment of the iron cores.

1. Switch to medium waves, turn v/control to maximum position and gang condenser fully into mesh.
2. Connect Signal Generator across aerial gang condenser and inject 470 Kc/s.
3. Fully unscrew the bottom cores (beneath chassis) in each I.F. transformer. Then adjust the cores for maximum output in the following order :
 - (a) Top core of 2nd I.F. Transformer
 - (b) Top core of 1st I.F. Transformer
 - (c) Bottom core of 2nd I.F. Transformer
 - (d) Bottom core of 1st I.F. Transformer

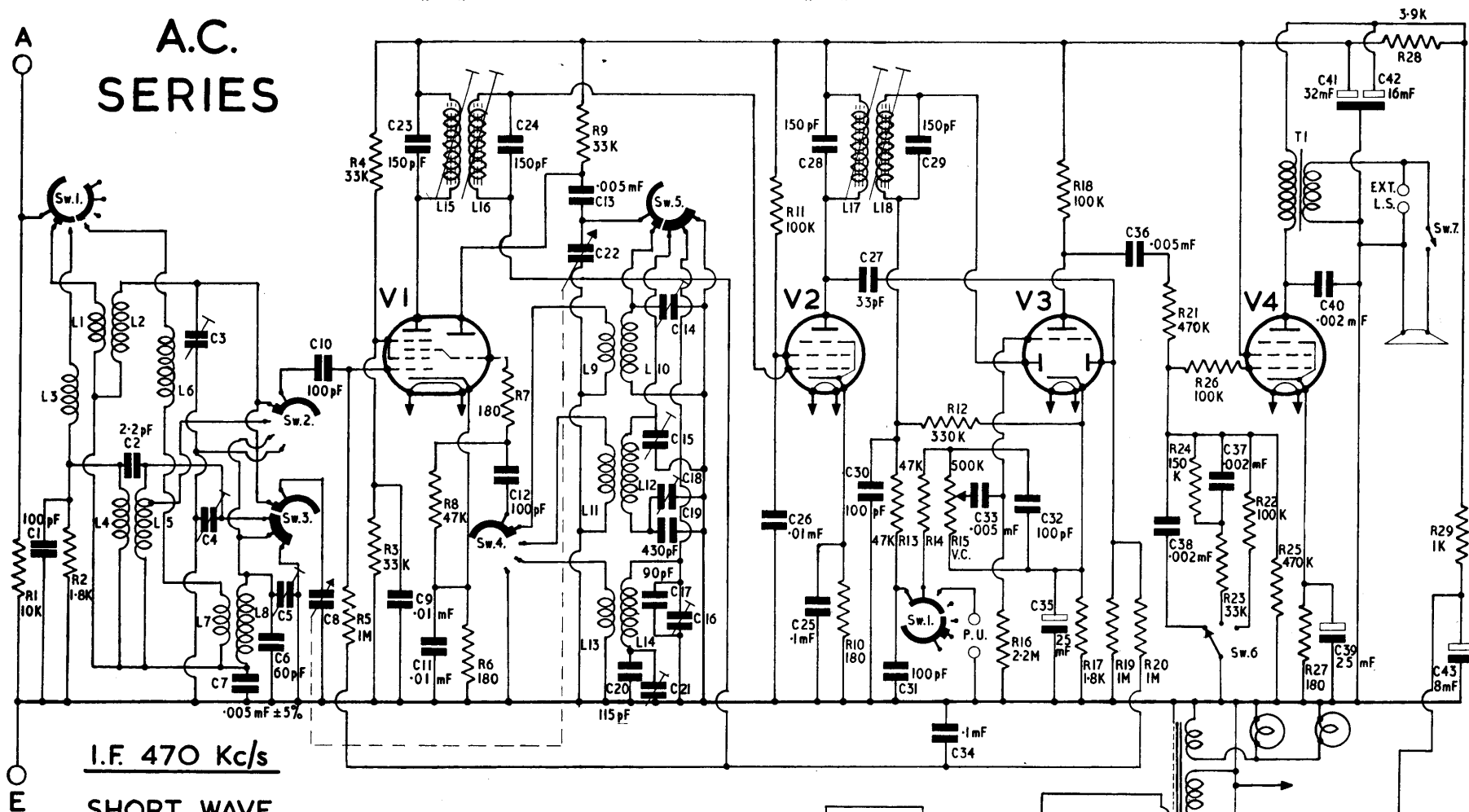
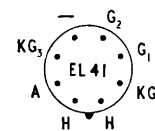
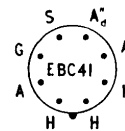
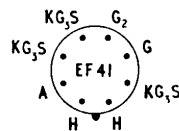
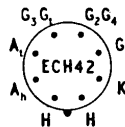
Progressively reduce signal input as the circuits come into line to avoid A.V.C. action ~~and repeat the alignment at least once.~~

CALIBRATION

1. Connect signal generator to A and E sockets, using a suitable artificial aerial.
2. Check that the scale pointer aligns with the 'dot' at the right-hand end of the L.W. Scale when the gang condenser Vanes are fully in mesh. Adjust pointer if necessary.
3. Switch to short waves. Set scale pointer at 17 metres and feed in a signal at 17.6 Mc/s. Tune it in with oscillator trimmer C14, then trim aerial circuit with C3 for maximum output.
4. Switch to medium waves. Set pointer at 200 metres and feed in a signal at 1.5 Mc/s. Tune it in with M.W. oscillator trimmer C15, then trim aerial circuit with C4 for maximum output.
Set pointer at 500 metres and feed in a signal at 600 Kc/s. Tune it in with M.W. oscillator padding condenser, C18, to give maximum output while rocking gang slightly. Check calibration at 200 metres and repeat operations if necessary.
5. Switch to long waves. Set pointer at 1000 metres and feed in a signal at 300 Kc/s. Tune it in with L.W. oscillator trimmer C16, then trim aerial circuit with C5 for maximum output.
Set pointer at 2000 metres and feed in a signal at 150 Kc/s. Tune it in with L.W. oscillator padding condenser C21, rocking gang slightly while adjusting for maximum output. Check calibration at 1000 metres and repeat operations if necessary.

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A.C. SERIES



I.F. 470 Kc/s

SHORT WAVE

TRIM AT 17 METRES, C14, C3.

MEDIUM WAVE

TRIM AT 200 METRES, C15, C4.
PAD AT 500 METRES, C18.

LONG WAVE

TRIM AT 1000 METRES, C16, C5.
PAD AT 2000 METRES, C21.

